

ABSTRACT

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The present invention realizes a steering device in which the dimensional tolerances of the components and variations in the finish thereof impart little adverse effects on the energy absorption performance of the device. In the energy absorption type steering device, an outer cylindrical member, or an outer tube, is press-fitted around an inner shaft member, or an inner tube. The outer shape of the inner shaft member and the inner shape of the outer cylindrical member have a circular cross section and the diameter of the inner shape of the outer cylinder member is larger than the diameter of the outer shape of the inner shaft member. A plurality of fine members is disposed along the axial direction between the circular cross-sectional outer shape and the circular cross-sectional inner shape in order to provide a clearance between the inner shaft member and the outer cylindrical member.

In the energy absorbing steering device, the inner shaft member and the outer cylindrical member each include a portion that substantially contributes to energy absorption, and the fine members prohibit the inner shaft member from directly contacting the outer cylindrical member at least in this portion. Thus, the energy absorption performance is less susceptible to the effects of dimensional tolerances of the inner shaft member and outer tube member and variations in the finish thereof. Accordingly, a robust technique is achieved.